

**IN THE CLAIMS:**

Please amend claims 1 – 3, and add claim 4 as shown in the following listing of the entire claims in the application:

1. (Currently Amended) A method ~~for manufacturing a nucleic acid array~~ of attaching an array of single-stranded hybridizeable nucleic acid probes for use in detecting nucleic acids by hybridization comprising the steps of:  
providing a substrate having a surface in which on which maleimide functional groups are formed on a surface;  
covalently immobilizing single-stranded nucleic acid said probes unto said surface using said functional groups to form a first region comprising the covalently immobilized probes and a second region wherein the probes are not covalently immobilized for hybridizing to the nucleic acids on a first region of the surface covalently ;  
after said immobilizing single-stranded nucleic acid probes, hydrolyzing unreacted maleimide functional groups formed on the second region where said single-stranded nucleic acid probes are not immobilized to form new functional groups which are negatively charged in an aqueous environment.
2. (Currently Amended) A method ~~for manufacturing a nucleic acid array~~ of attaching an array of single-stranded hybridizeable nucleic acid probes according to claim 1, wherein said single-stranded nucleic acid probes are bonded via thioether linkage to said maleimide functional groups.
3. (Currently Amended) A method ~~for manufacturing a nucleic acid array~~ of attaching an array of single-stranded hybridizeable nucleic acid probes according to claim 1, wherein said maleimide functional groups ~~[[is]]~~ are hydrolyzed in an alkaline solution.
4. (New) A method of detecting nucleic acids by hybridization using the covalently immobilized hybridizeable probes according to claim 1.